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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,289	07/27/2001	Martin W. Frash	55892 (71850)	8099

7590

07/18/2002

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EXAMINER

ELKASSABGI, HEBA

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 07/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,289

Applicant(s)

FRASH ET AL

Examiner

Heba Elkassabgi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-10, 12, 14, 15 is/are objected to.
- 8) ☒ Claim(s) 17-27 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-16 are drawn to the structure of the permanent magnet motor assembly of a flywheel, classified in class 310, subclass 156.31.

Group II. Claims 17-27 are drawn to method of reducing magnetic field leakage in a motor assembly, classified in class 29, subclass 587.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case an electromagnetic coil can be replaced with the permanent magnet in order to reduce the magnetic flux.

2. During a telephone conversation with Steven Jensen (Reg. # 42693) on June 28, 2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-16. Affirmation of this election must be made by applicant in replying

to this Office action. Claims 17-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamura et al. (U.S. Patent 4827170).

6. Kawamura et al. discloses in Figure 4 a permanent magnet motor having a stator (6) having a rotor (4) with an end that is proximate the stator (6) and the rotor (4)

rotating about the axis. The magnet (4b) is positioned along a length of the rotor (4) having an end that is proximal to the rotor, positioned near the stator. Further more, a shield (4b), which is cup, shaped extending around the magnet and against the rotor in order to reduce the magnetic flux.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. (U.S. Patent 4827170) and further in view of Ackerman et al. (U.S. Patent 6147427).

As seen above in paragraph six, Kawamura does not show a stator configured and arranged to receive a coil (32) with the stator (28) having a groove (31) for receiving the coil (32) as substantially disclosed in the claimed invention.

Ackerman et al. discloses in fig. 1 a permanent magnet motor comprising a rotor (1) and a stator configured and arranged to receive a coil with the stator having a groove for receiving the coil, for the purpose of positioning the coil in the stator.

It would have been obvious to one of ordinary skill in the art to modify Kawamura et al. with Ackerman et al. for the purpose for supporting the coil.

9. Claims 11, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. (U.S. Patent 4827170) further in view of Ackerman et al. and Foerster et al. (U.S. Patent 6359363 B1).

10. Kawamura et al. discloses in Figure 4 a permanent magnet motor having a stator (6) having a rotor (4) with an end that is proximate the stator (6) and the rotor (4) rotating about the axis. The magnet (4b) is positioned along a length of the rotor (4) having an end that is proximal to the rotor, positioned near the stator. Further more, a shield (4b), covering the proximal end of each magnet in order to reduce the magnetic flux. However, Kawamura et al. does not disclose a stator having a groove for receiving the stator coil and a second rotor.

Ackerman et al. discloses in fig. 1 a permanent magnet motor comprising a rotor (1) and a stator configured and arranged to receive a coil with the stator having a groove for receiving the coil, for the purpose of positioning the coil in the stator.

Foerster et al. illustrates in Fig. a permanent magnet motor having a first rotor (12) and second rotor (28), where the second rotor is rotating about the rotational axis for the purpose of having a compact structure.

It would have been obvious to one of ordinary skill in the art to modify the innovation of Kawamura et al. with Ackerman et al. for the purpose of positioning the coil in the stator and Foerster et al. for the purpose of having a compact structure.

Allowable Subject Matter

11. Claims 4, 5, 7, 8,9,10, 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. The examiner can normally be reached on M-Th (6:30-3:30), and every other Friday.

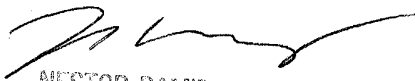
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HYE
July 15, 2002


NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800